# VT-9
# CQ-1-3 Brief

# MOTHERHOOD

LSO-STUDENT RELATIONSHIP

PERSONAL PROBLEMS

EXPECTATIONS

- BE ON TIME!!
- HAVE FUN!!

# LSO BACKGROUND

LT Tom Cronley

Snowball

S-3B Viking

# LSO BACKGROUND

LT Scott MacCallum
Stiffler
E-2C Hawkeye

# LSO BACKGROUND

LT Meghan Angermann
Muffin
F/A-18F Super Hornet

# MAXIMIZING FCLP EXPERIENCE

- PICK YOUR LSO's BRAIN DURING DEBRIEFS
- MAKE EVERY PASS / PERIOD COUNT
  - ADJUST / DON'T MAKE SAME MISTAKES AGAIN AND AGAIN AND AGAIN AND AGAIN AND AGAIN AND AGAIN…
  - BRACKET!!!
- RECORD HUD AND REVIEW YOUR TAPE

  (For learning points, not grade discussion!)

# FCLP BRIEF'S

BE ON TIME

GAGGLE BRIEF

SET UP A BOARD

- LINEUP, OVERHEAD TIMES, HP/HS PLAN WITH VT-7
- BRIEF ITEMS
- EMERGENCIES

# MANUP

- WALK TO MAKE YOUR OVERHEAD TIMES!!
  - UNLESS DICTATED OTHERWISE BY LSOs
- ADBs FROM MAINTENANCE
- PREFLIGHT
  - START PRACTICING CV PREFLIGHT
- SNAs TAKING VAN TO NJW
  - DIRECTIONS
    - HWY 39 N TO DEKALB AND TURN LEFT ON HWY 16
  - PICK UP KEYS FROM SDO
  - BRING YOUR FLIGHT GEAR
  - DON’T SCREW IT AWAY

# COURSE RULES TO NJW

CALLSIGN:  1AXXX

CLEARANCE

- REQUEST JOE WILLIAMS DEPARTURE
- RUNWAY HDG TO 2K / RADAR VECTORS

NAV SETUP

- NJW RUNWAYS IN THE BRICK
- COURSE LINE - RWY 13: 134º  RWY 31: 314º

MONITOR BASE FOR CONTINGENCIES

# COURSE RULES TO NJW

- WX MINS
- NJW TACAN APPROACH (IFG)
- NJW TOWER BUTTON 9
  - WAIT ~15 SECS BEFORE CHECKING IN
  - READ BACK R/W NUMBER WITH INITIAL/BREAK CALL
- BREAK - CARRIER
  - 300 KTS / 1300’ MSL
  - TOWER WILL CALL INTERVAL
  - LEVEL BREAK / CHECKING BELLY
- LSO NOT ON STATION
  - DELTA / ENSURE CORRECT RWY

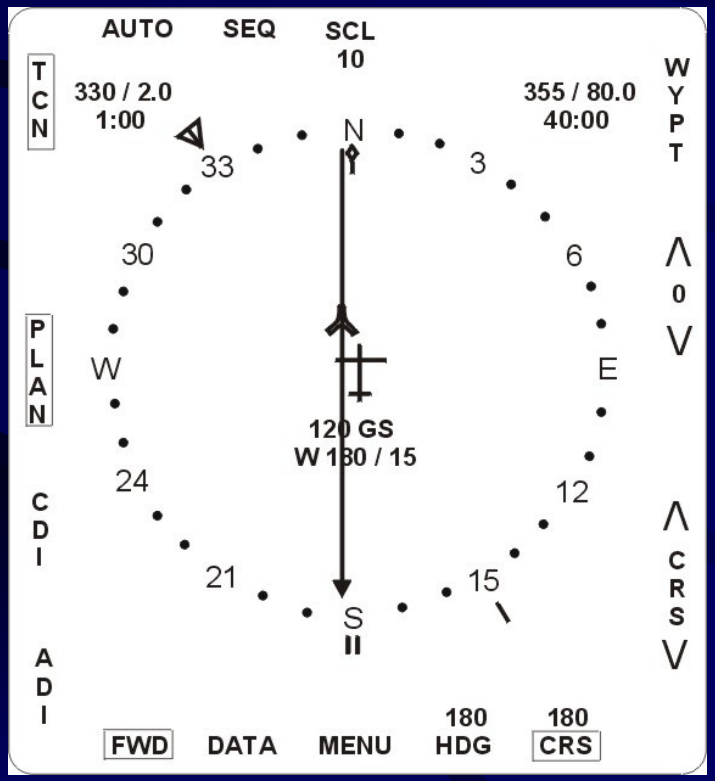
# BREAK

BREAK

- 300 KTS / 1100’ MSL or 1400’ MSL
- TOWER WILL CALL INTERVAL
- LEVEL BREAK / CHECKING BELLY

DOWNWIND

- ABEAM
  DIST?
- HSI GOUGE
- 30 DEG = ?
- 45 DEG = ?



# PATTERN - NJW

- 1100’ MSL
- LANDING CHECKS
  - TAXI  LIGHT OFF (CHA-CHING)
- WINDS
- HSI SETUP
- TRIM / TRIM / TRIM
- ABEAM CALL
  - FROM THIS POINT ON YOU ARE UNDER LSO CONTROL
- ABEAM DISTANCE

# APPROACH TURN

ABEAM TO 180°

- TIMING vs. GROUND GOUGE
- EFFECT OF WINDS

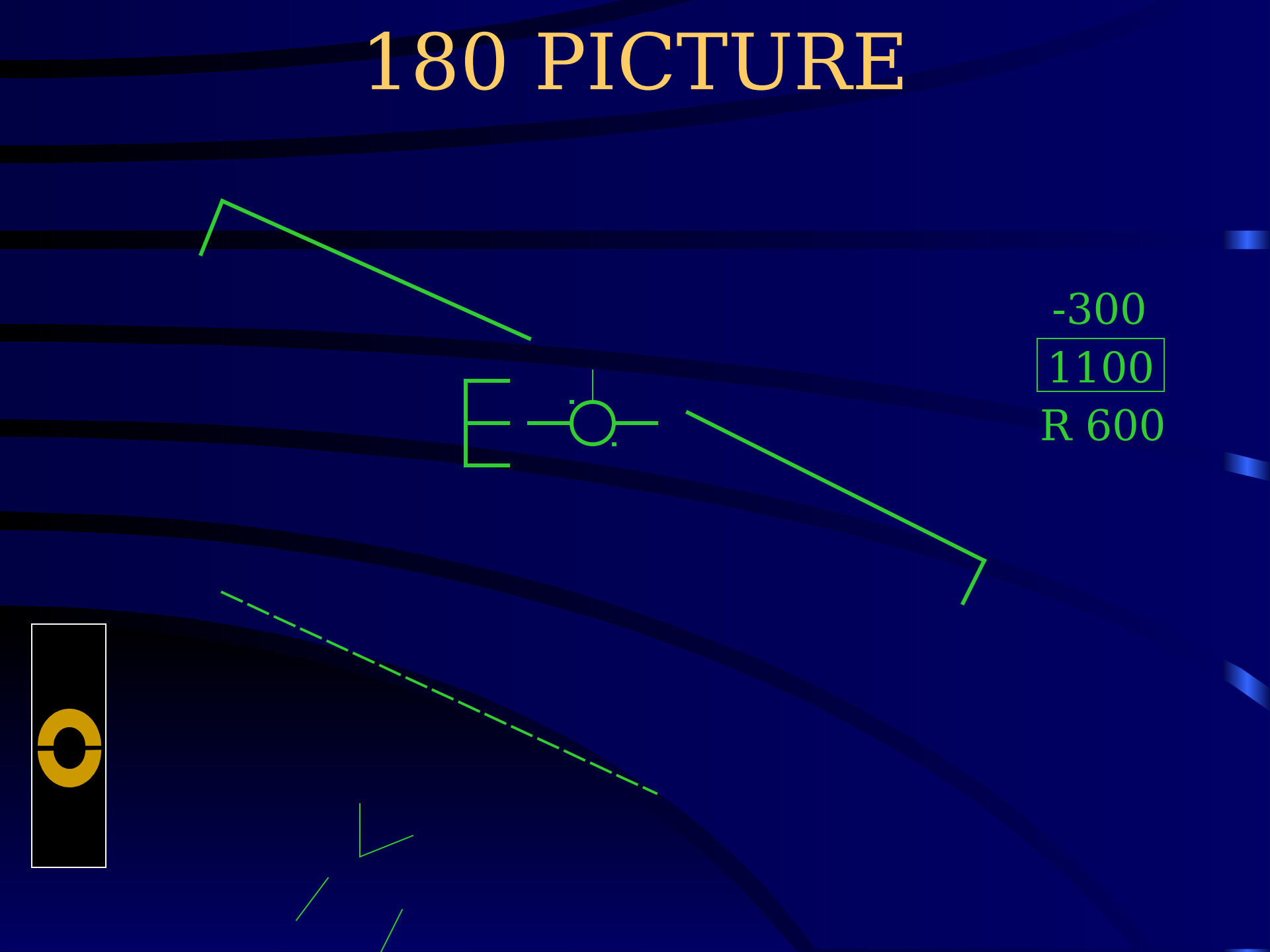
180° POSITION

- POWER / PAUSE / TURN
- 300 FPM, ~27º AOB, ON SPEED

135° POSITION

- VSI, AOB, AOA / 100% INSTRUMENTS

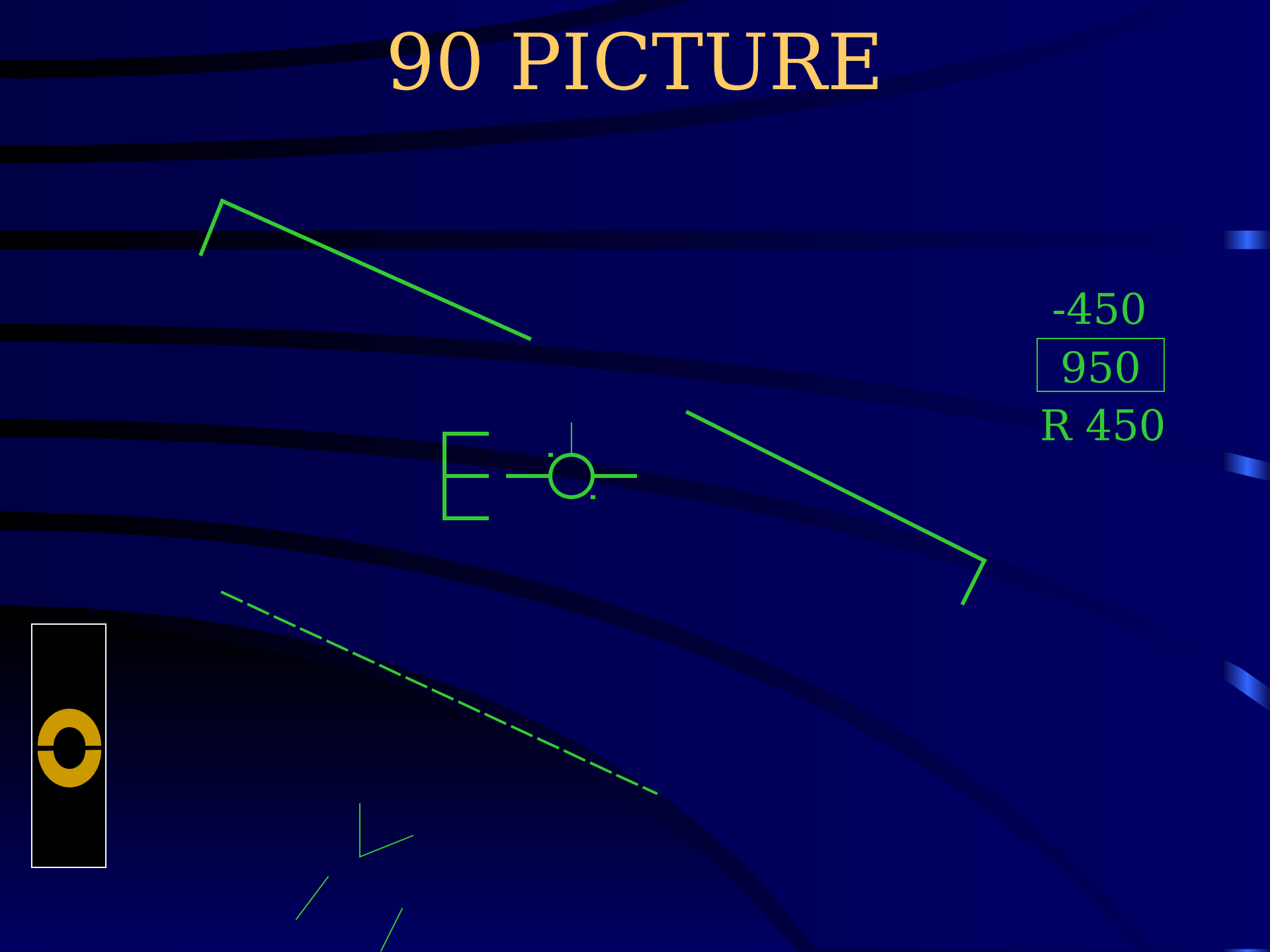
# 180 PICTURE



# APPROACH TURN

90 º POSITION

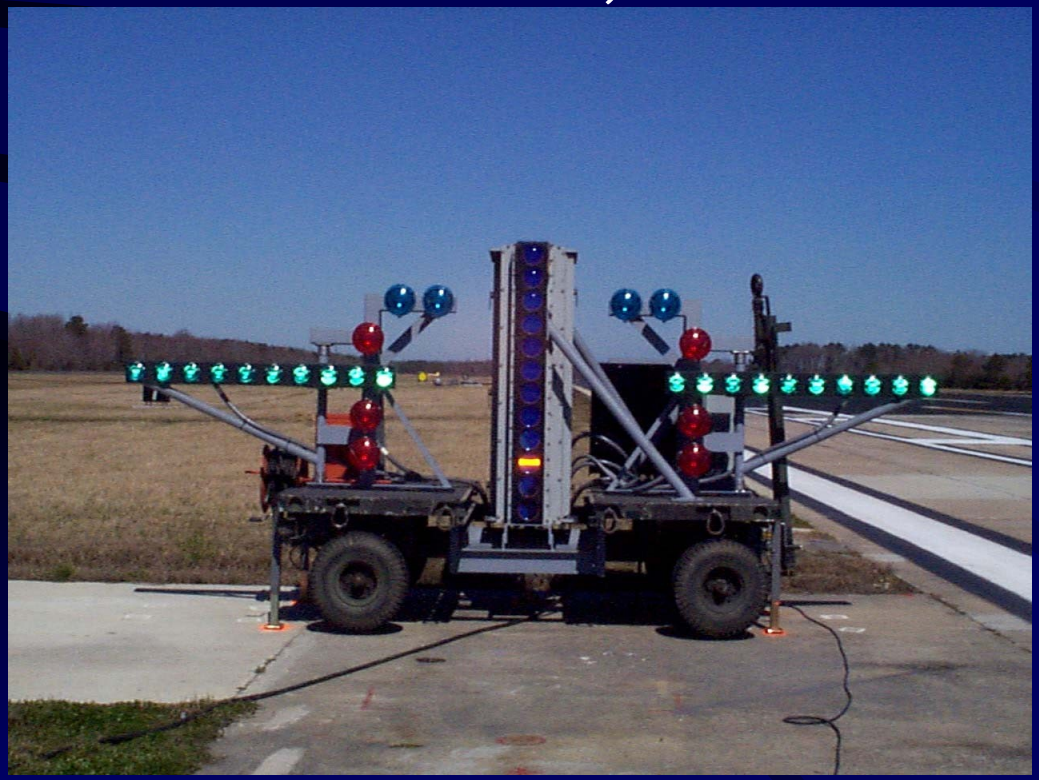
- 450’ AGL, BARO:  NMM (750’) / NJW (950’)
- 500 FPM OR AS NECESSARY, ON SPEED
- QUICK SCAN OUTSIDE
  - ADJUST AOB AS NECESSARY
- *ADJUST FOR DEVIATIONS TO GET GOOD START*


90 PICTURE
-450
950
R 450

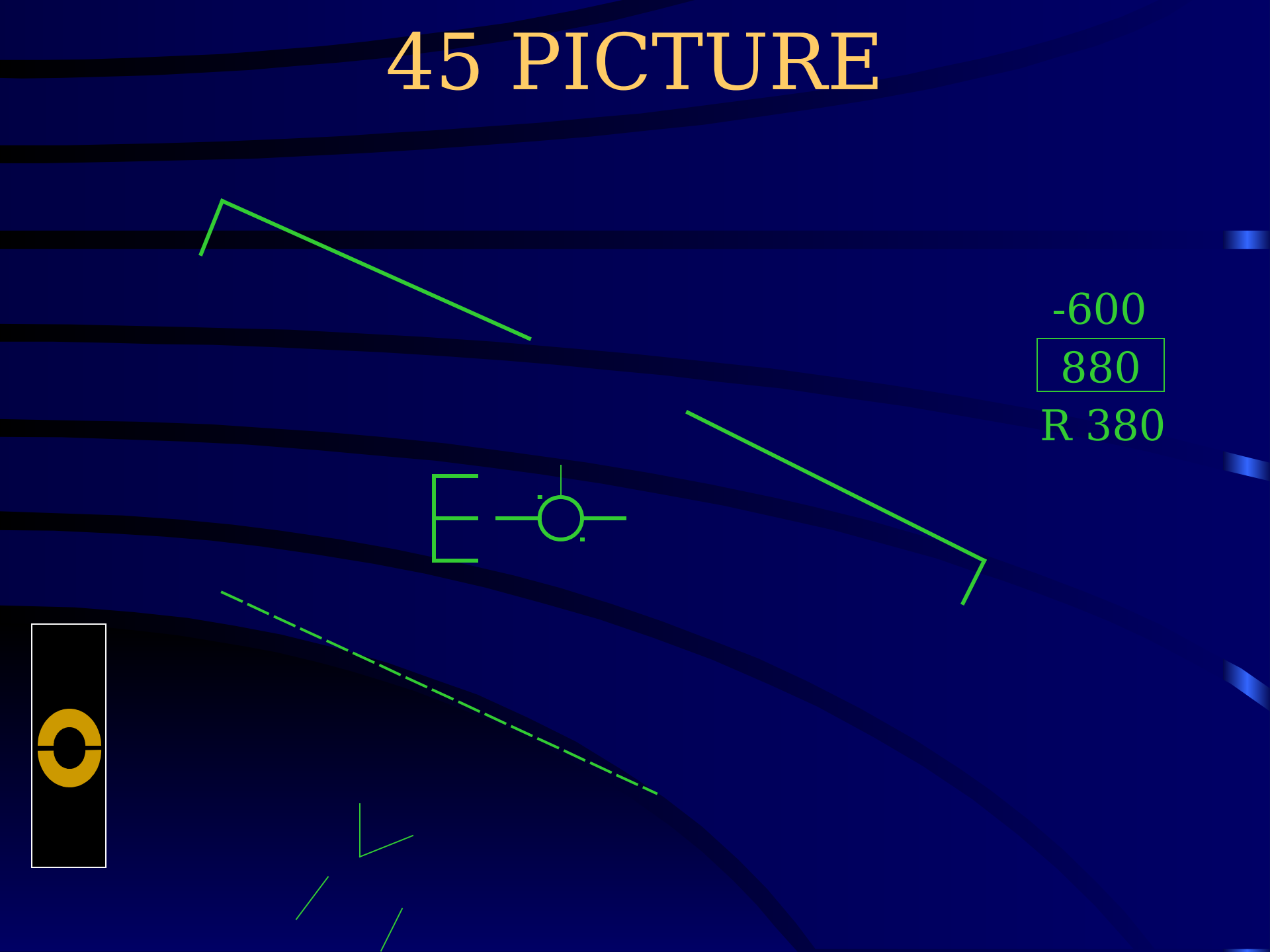
# APPROACH TURN

45 º POSITION

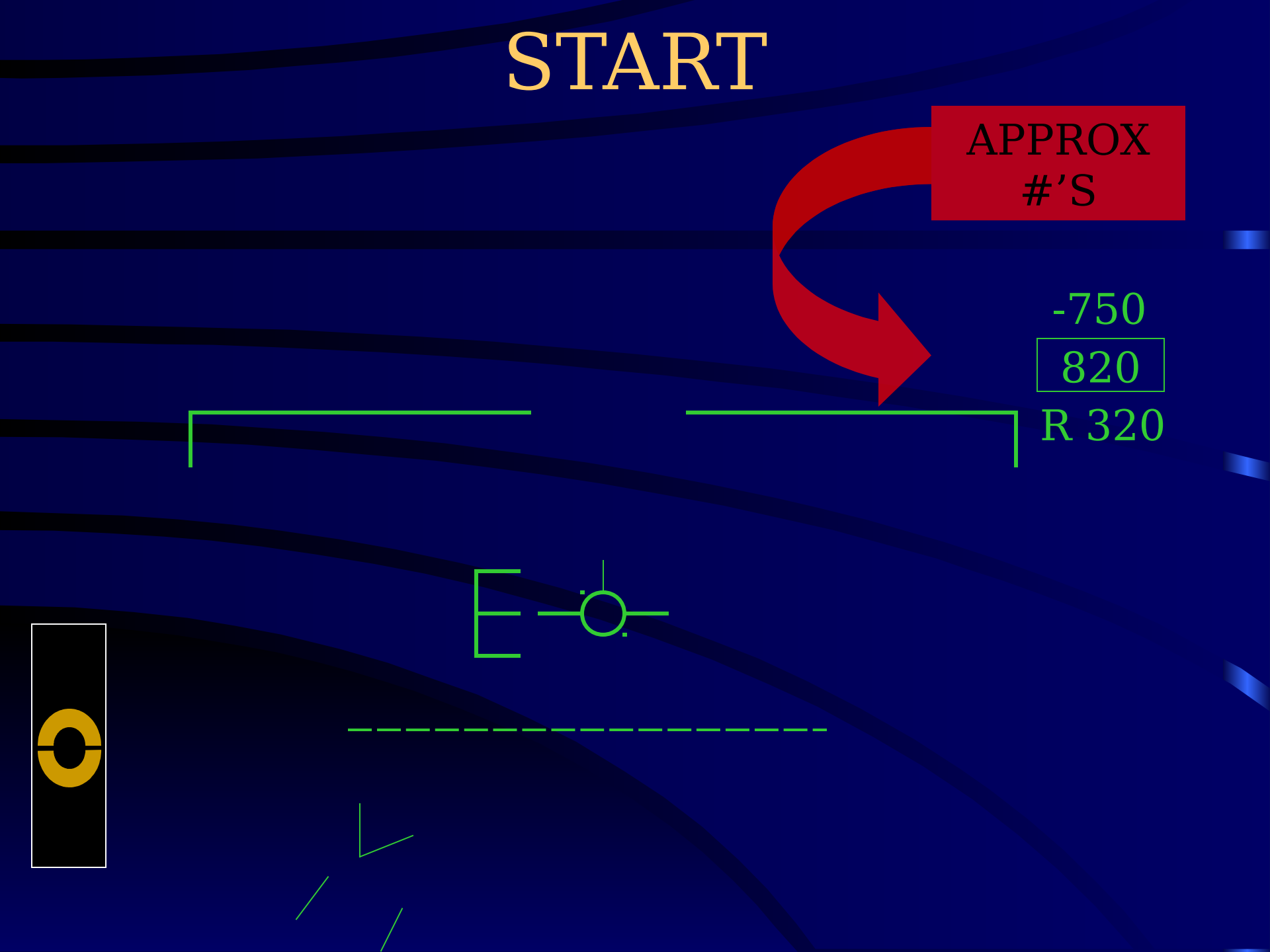
- 325-375’ AGL, 500 FPM OR AS NECESSARY
- AOB ADJUST AS NECESSARY / ON SPEED
- FIELD LENS INFO vs CV LENS INFO
  - REFERENCE THE BALL, BUT DON’T FLY IT YET



# 45 PICTURE



# START



# START

BALL CALL

- ACCURATE FUEL STATE
- USE OF CUT / WAVEOFF LIGHTS
- NO ROGER BALL

CLARA

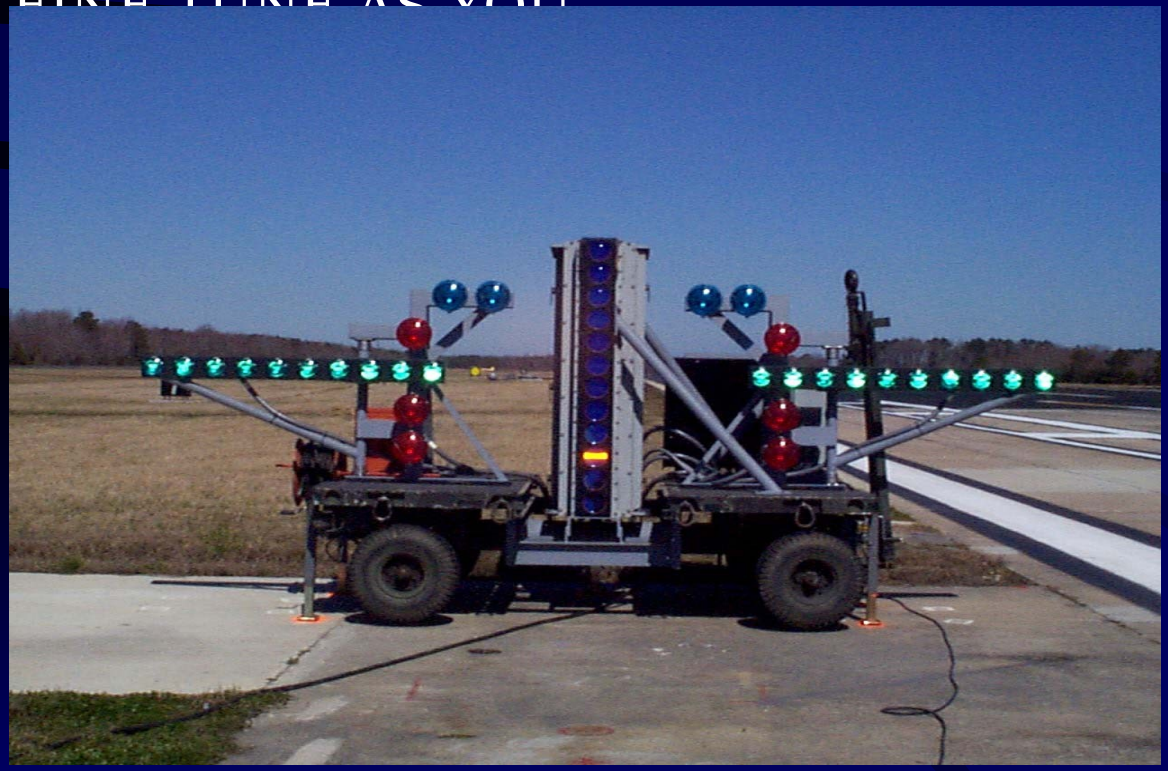
WINGS LEVEL TRANSITION

AGGRESSIVE CORRECTIONS EARLY

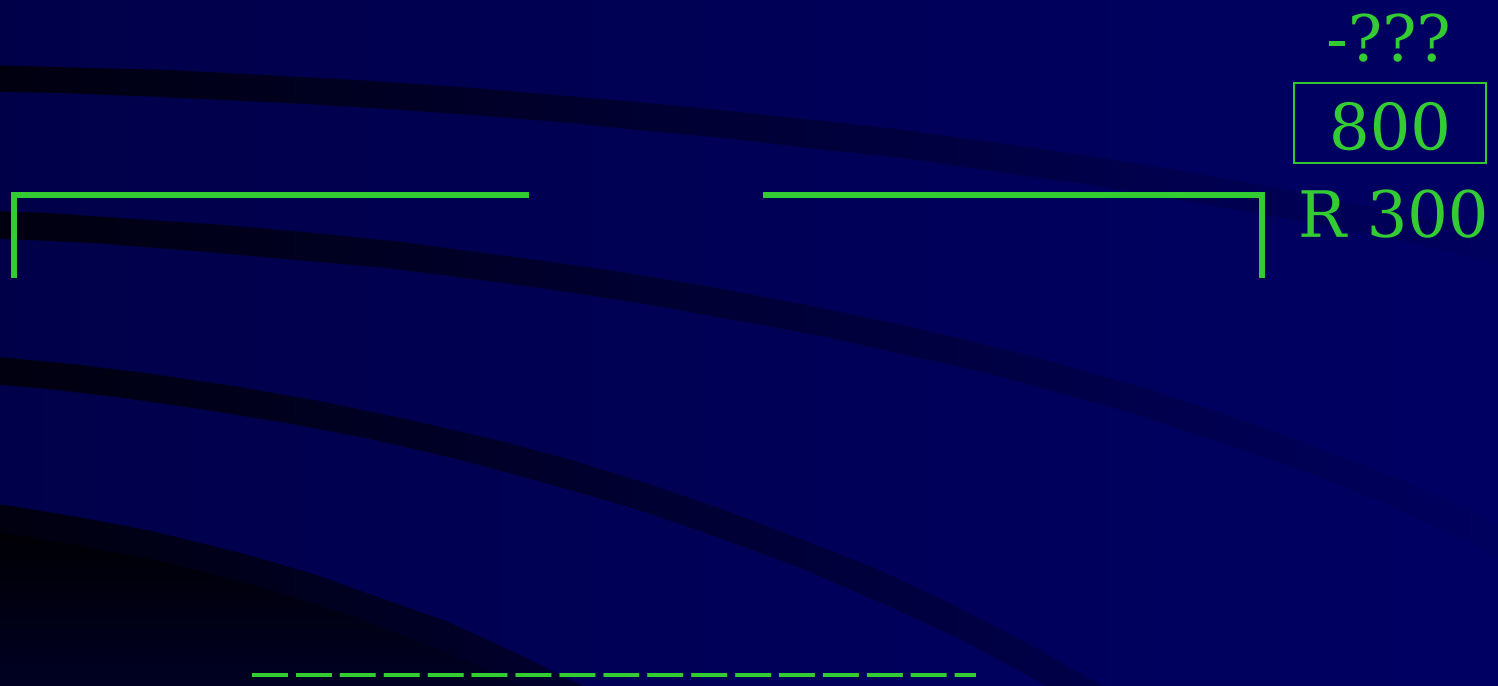
# IN THE GROOVE

GLIDESLOPE CONTROL

- FUNNEL EFFECT
  - MAKE BIG CORRECTIONS EARLY
  - FINE TUNE AS YOU

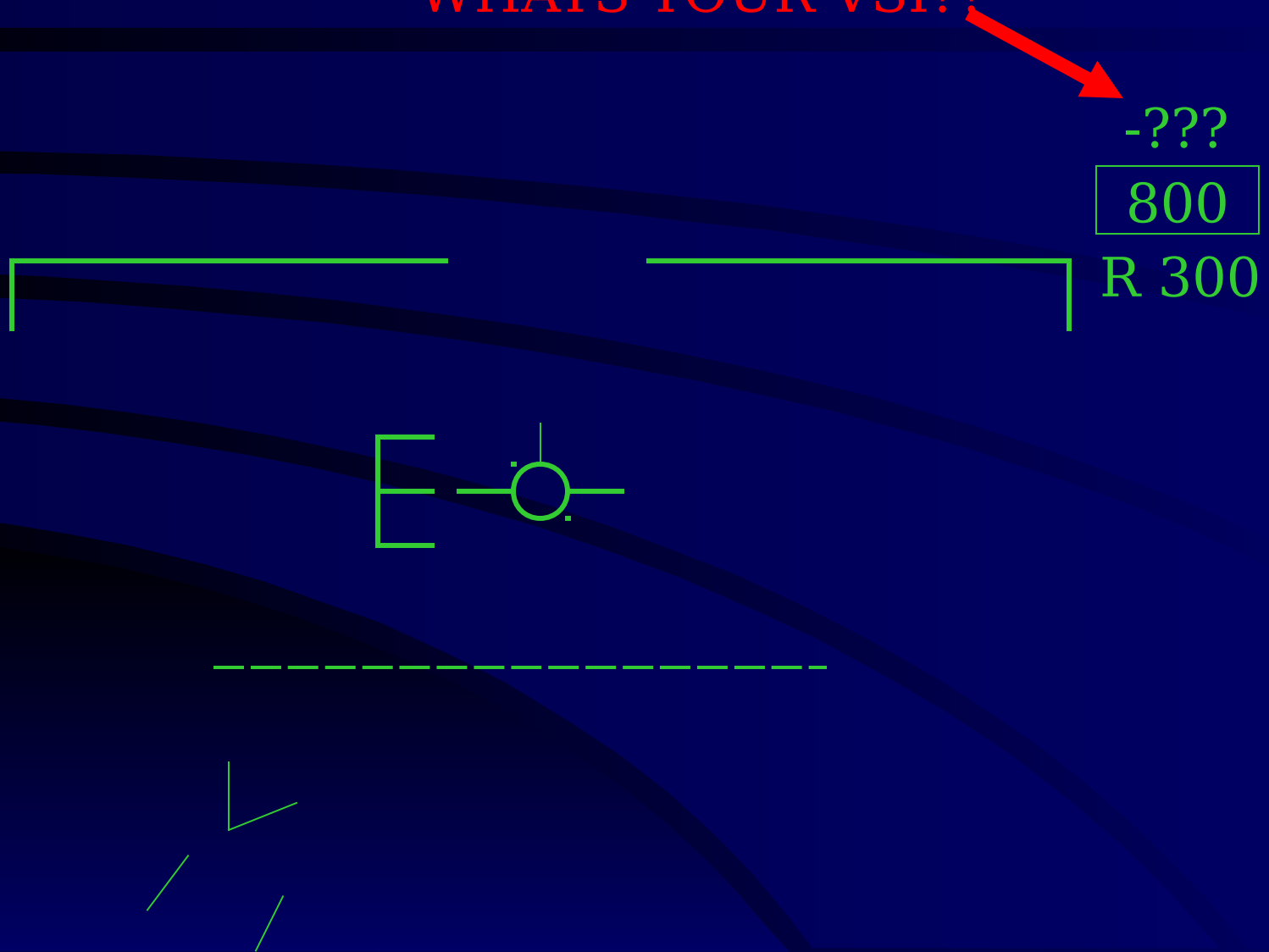


# WHICH IS MORE PRECISE??
# VV vs. VSI

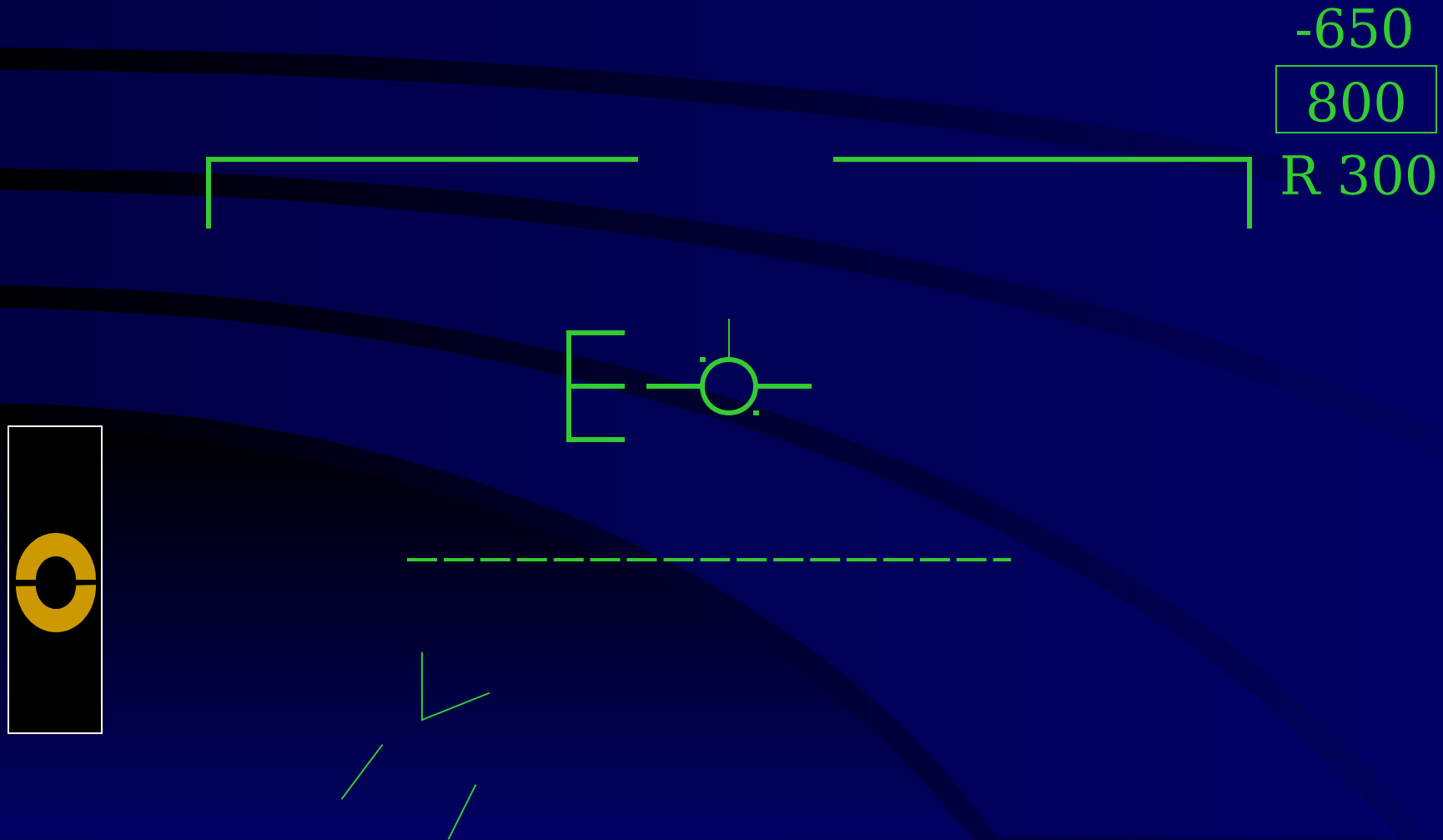


# VV vs VSI

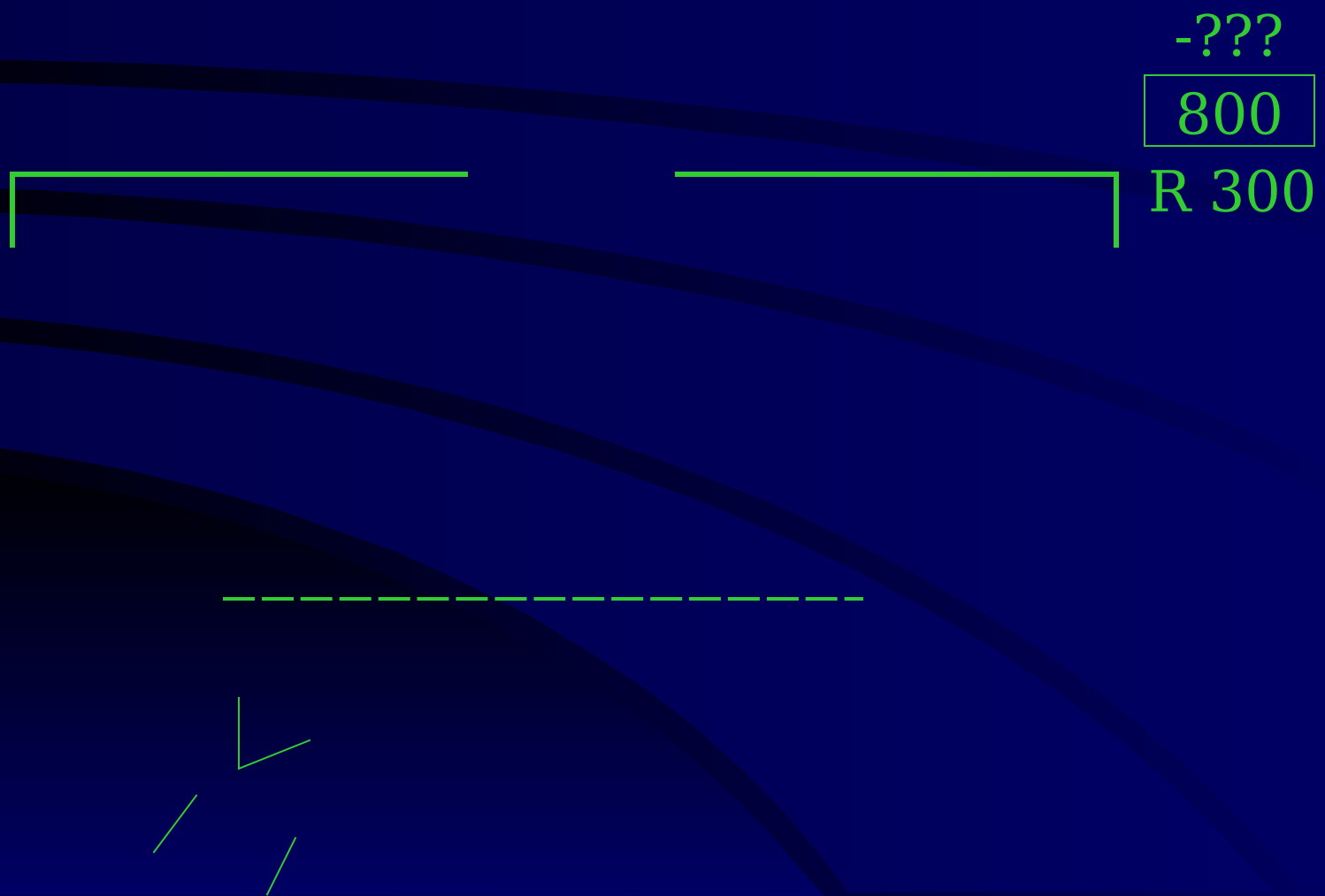
WHATS YOUR VSI??



# VV vs VSI

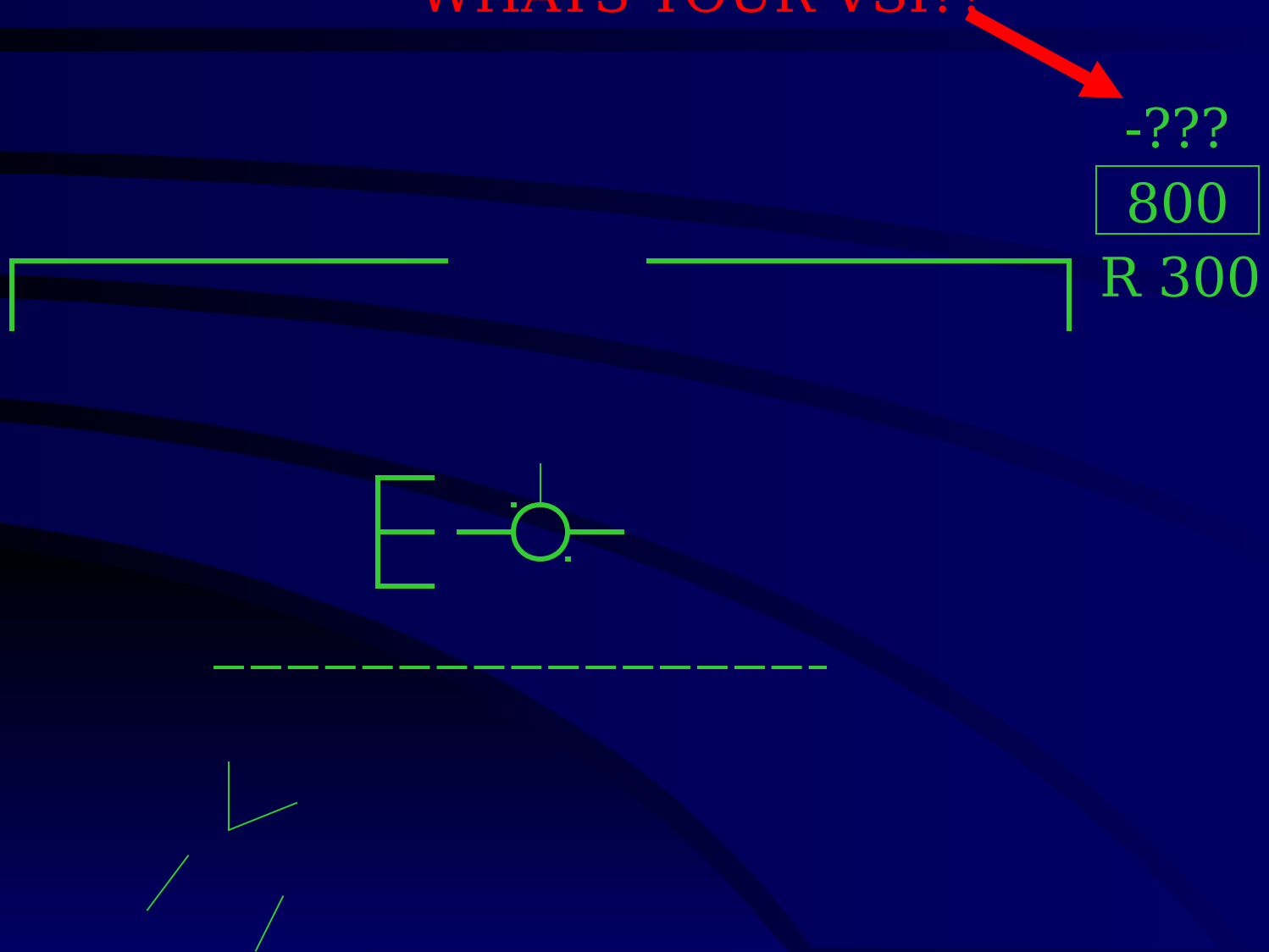


# VV vs VSI



# VV vs VSI

WHATS YOUR VSI??



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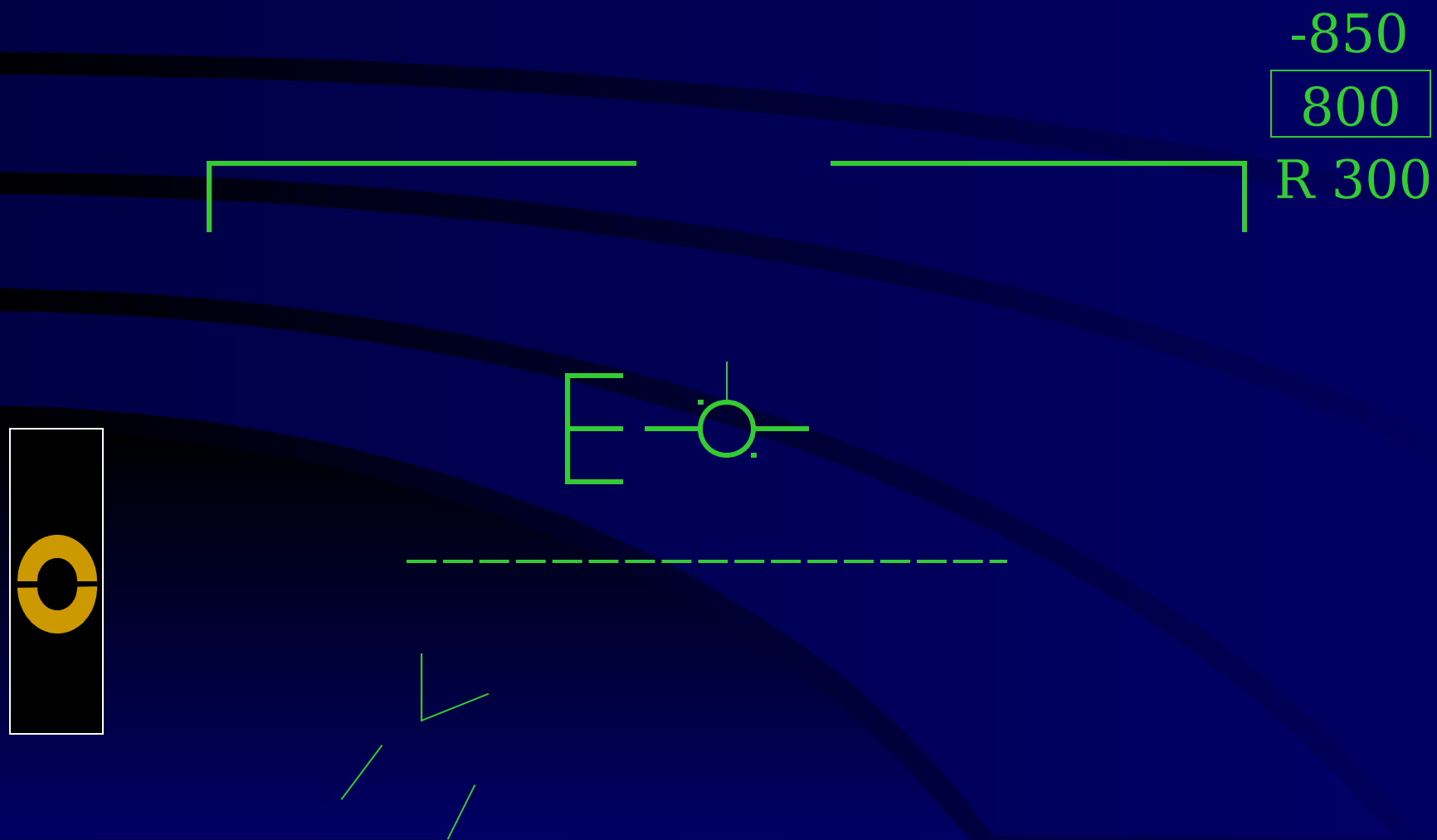

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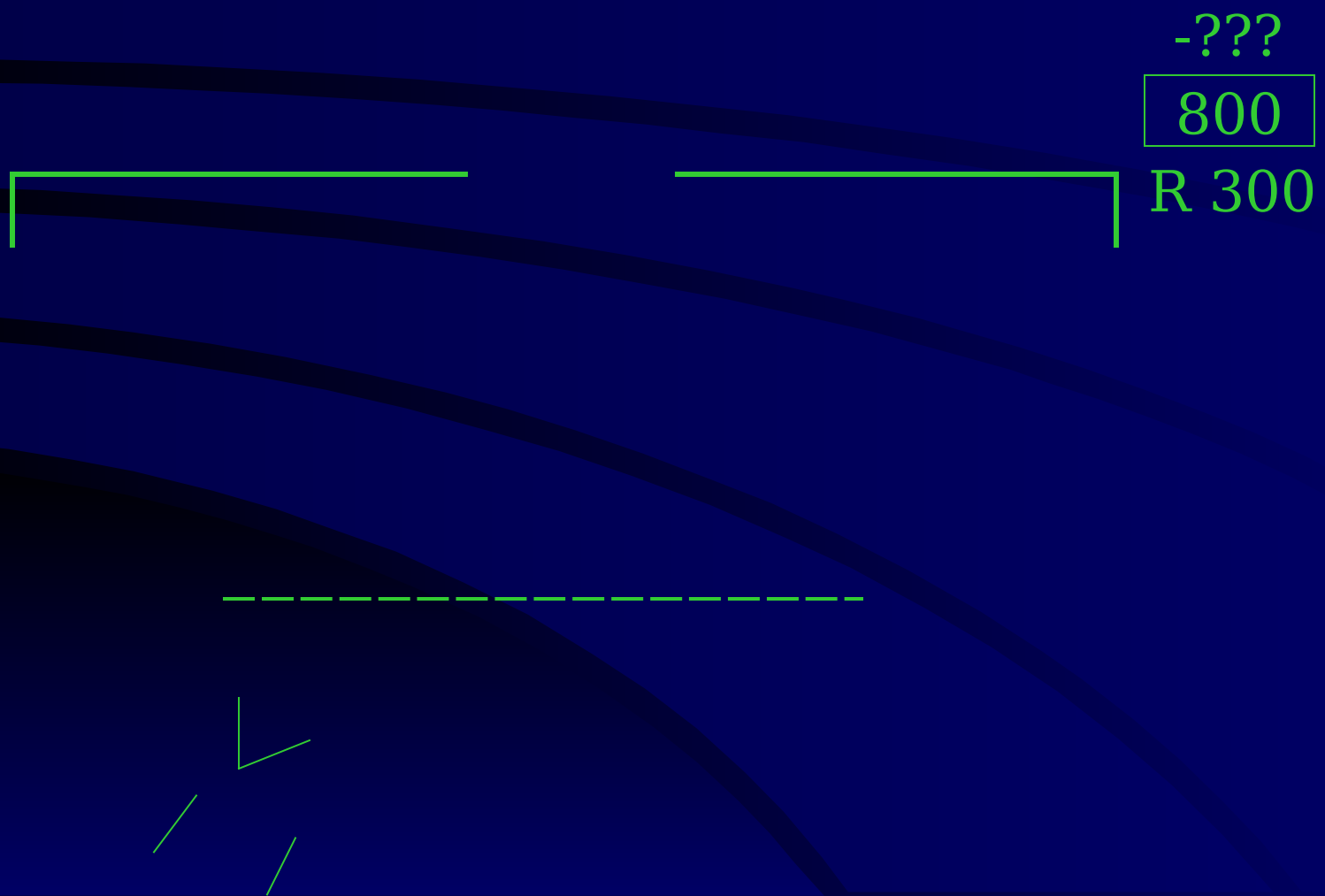
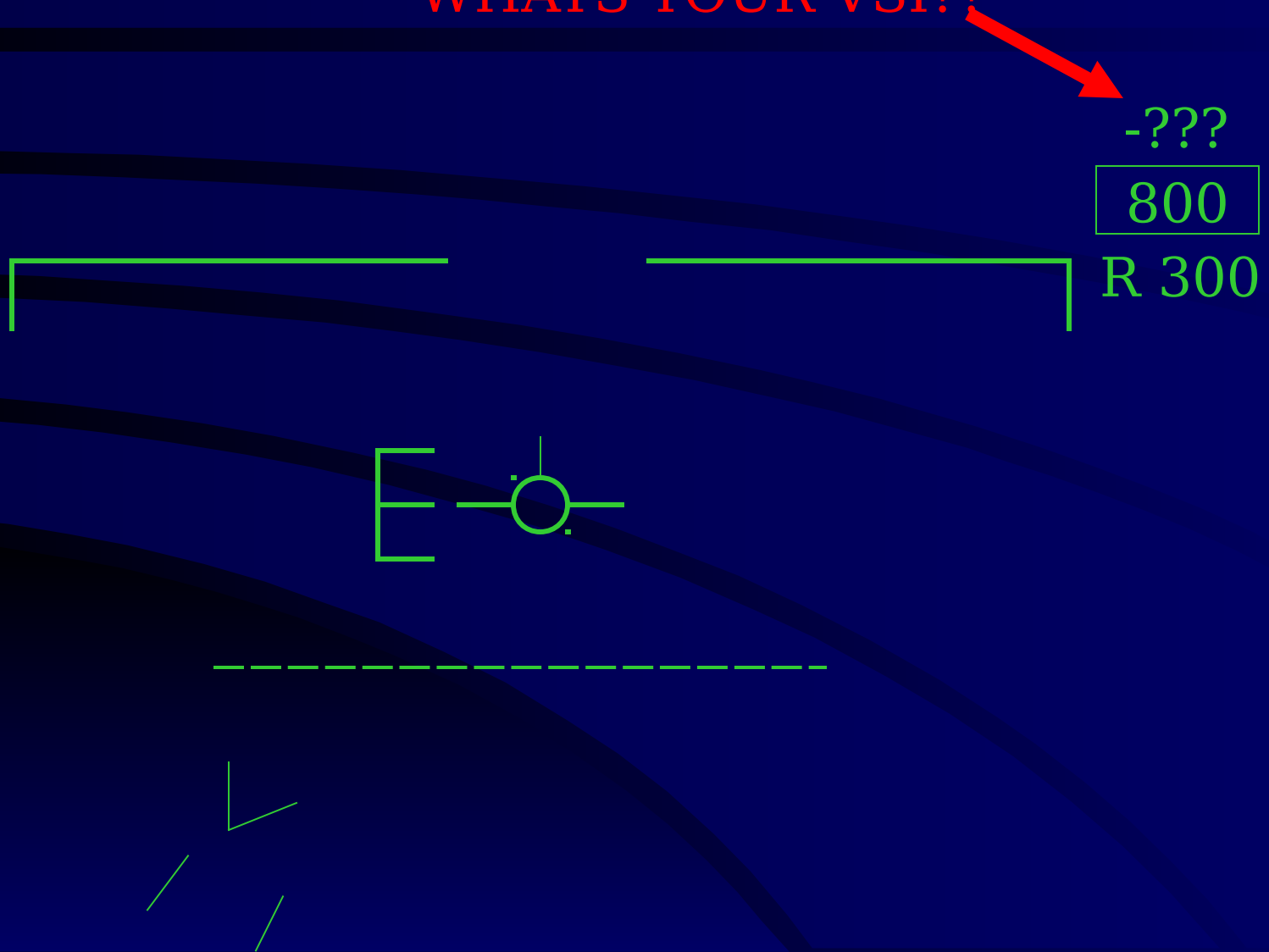


# VV vs VSI

WHATS YOUR VSI??



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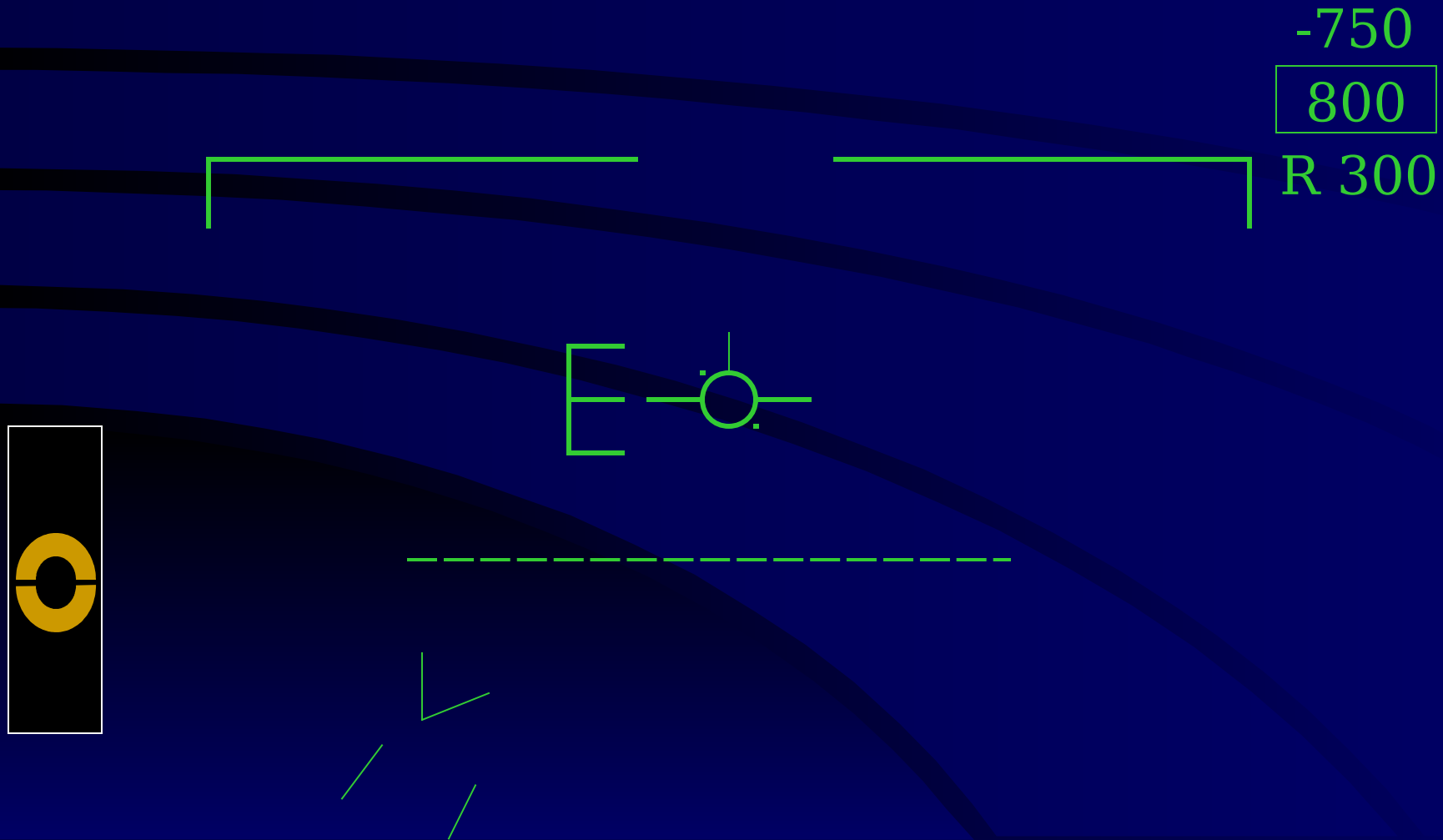
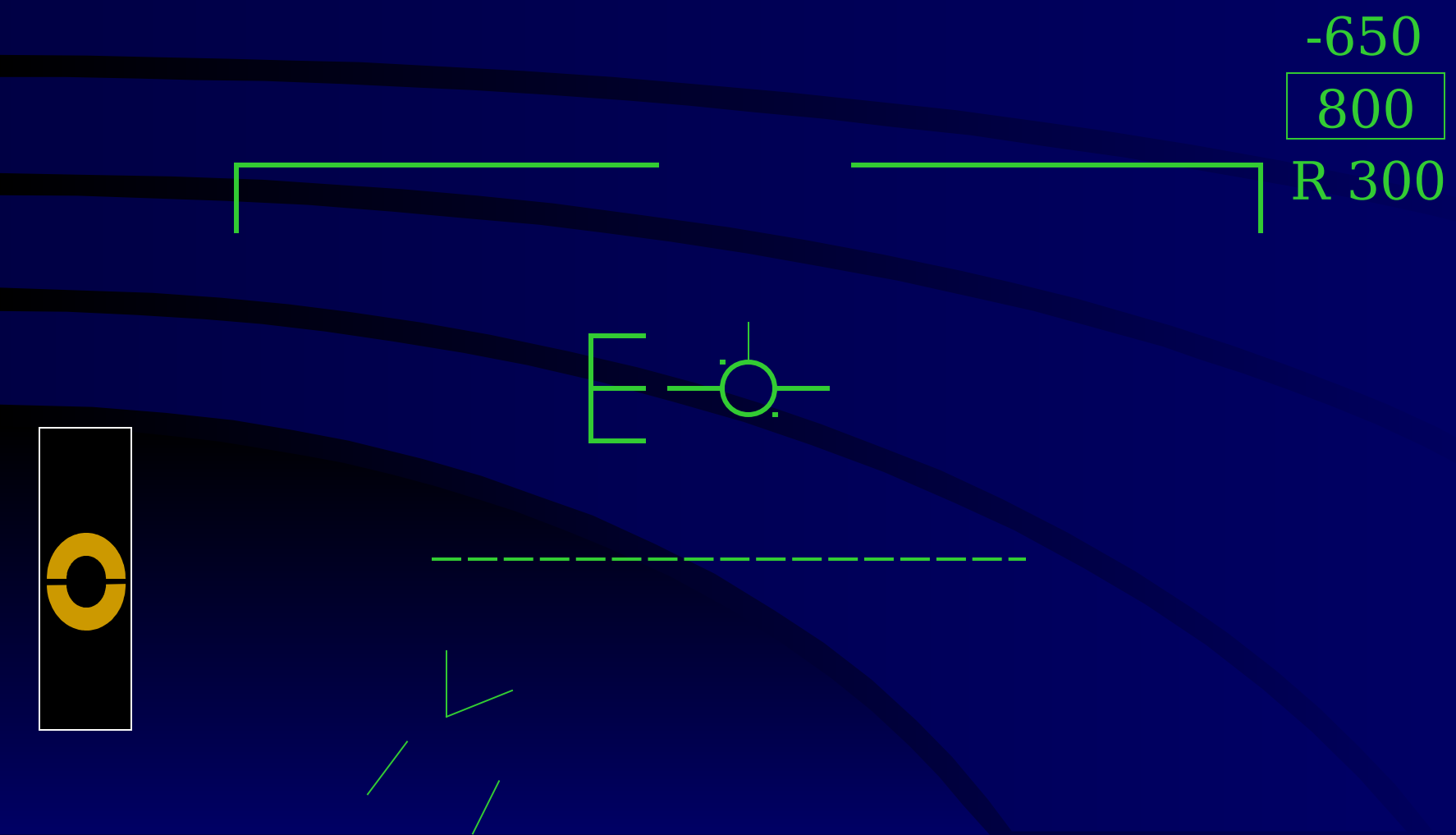


# TO SHOW I'M NOT SCREWING WITH YOU



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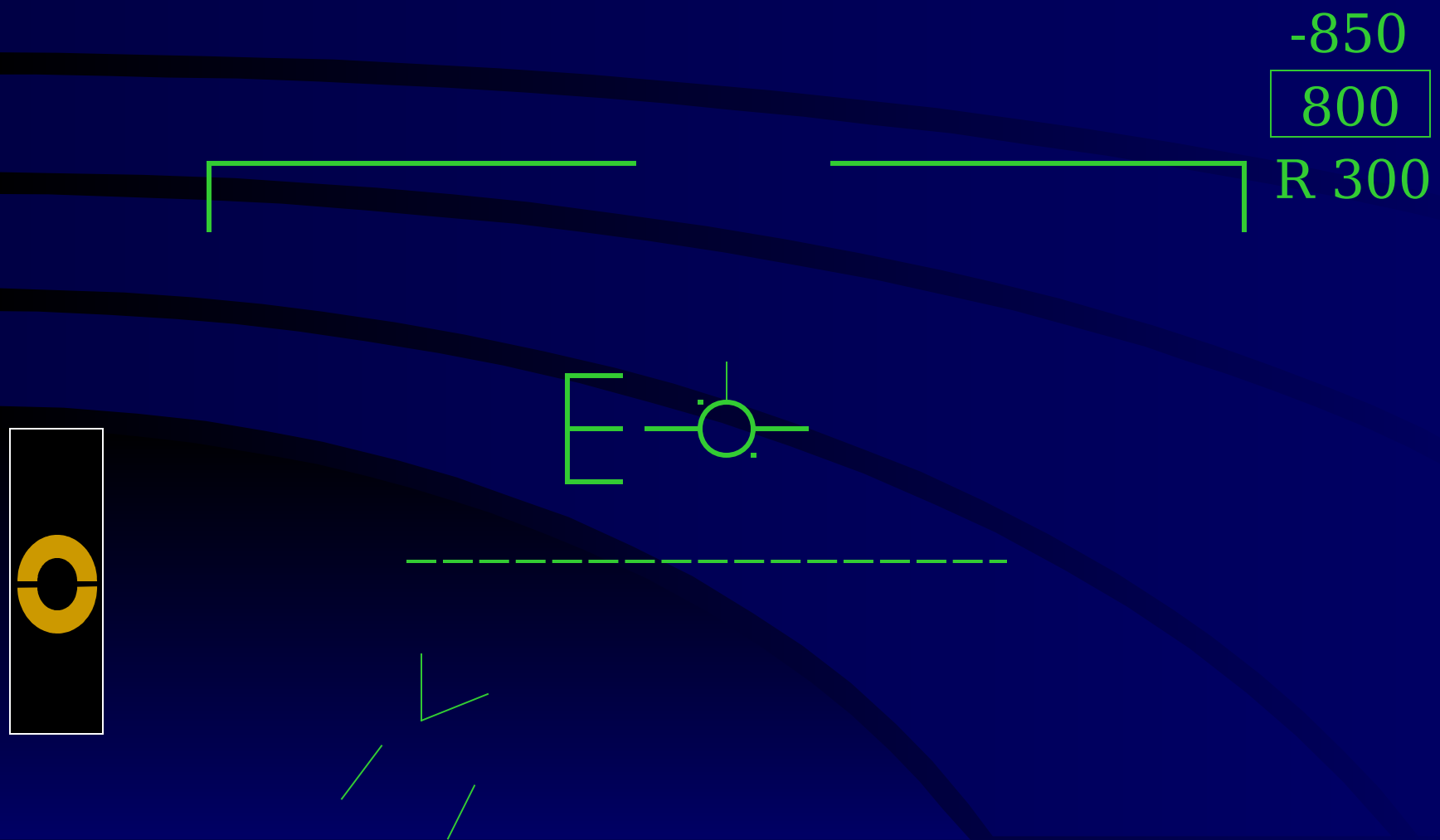

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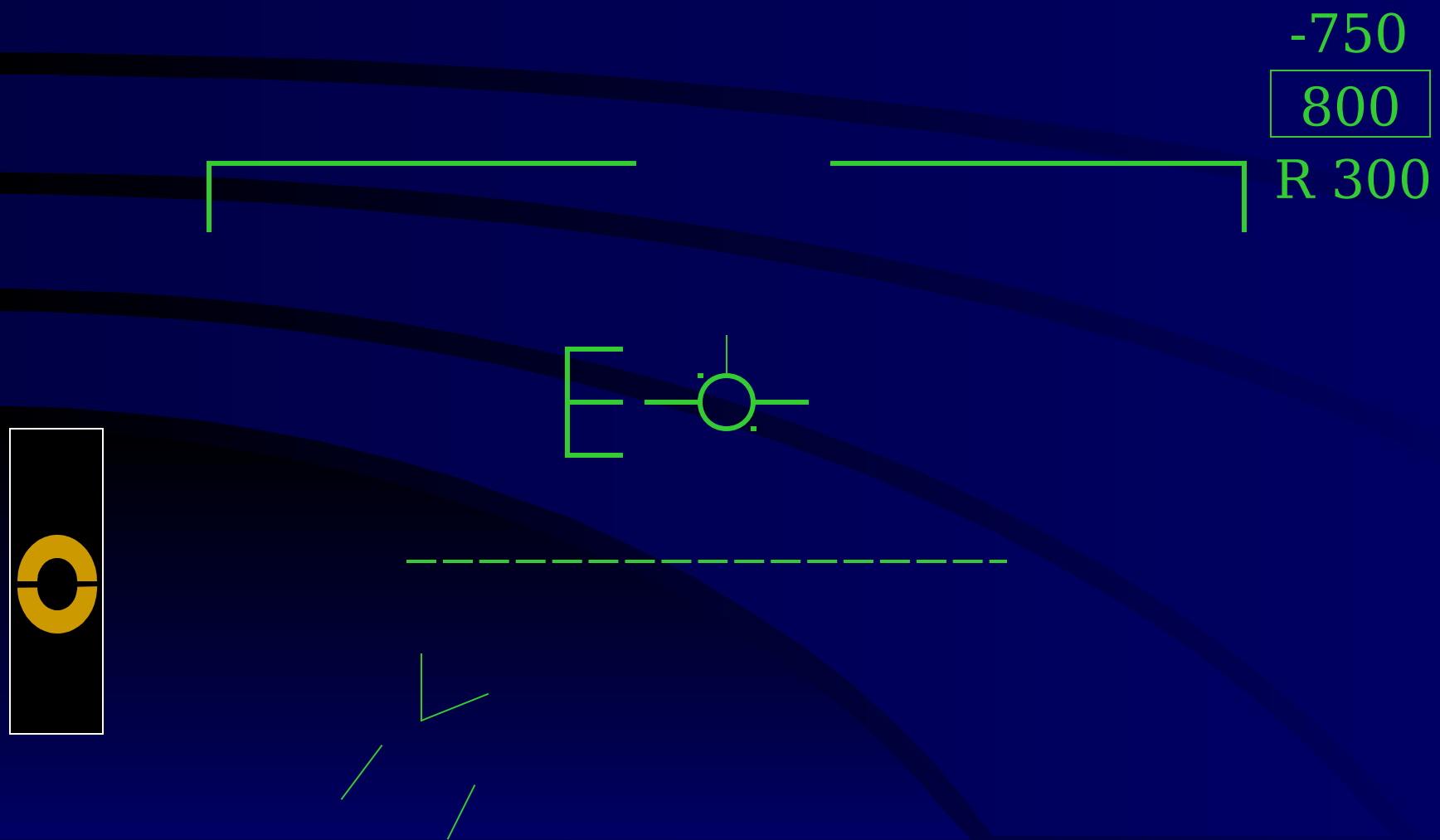


# IN THE GROOVE

## GLIDESLOPE CONTROL

- 3 PART CORRECTIONS
- DETECTING DEVIATIONS
  - VELOCITY VECTOR INFO vs VSI INFO vs LENS INFO

    - WHICH IS MOST ACURATE??
      - VELOCITY VECTOR INFO - VISUAL REPRESENTATION OF WHERE YOU ARE GOING AT THAT MOMENT. A SNAPSHOT IN TIME
      - VSI – TREND INSTRUMENT. FORTUNE TELLER. GIVES A NUMERICAL REPRESENTATION OF WHERE YOU ARE HEADED AND HOW FAST YOU ARE GOING TO GET THERE.
      - LENS – MOST PRECISE, BUT YOU HAVE TO BE ON SPEED AND ON CENTERLINE (SCAN BIG 3!!!)

# IN THE GROOVE

## GLIDESLOPE CONTROL (CONTINUED)

- ANTICIPATION vs REACTION
- DO NOT LEAD A LOW OR ACCEPT A LOW BALL
- DO NOT RE-CENTER HIGH BALL IN CLOSE
  - DON’T BE COMFORTABLE WITH HIGH PASSES!

# IN THE GROOVE

LINEUP

- DON’T DROP IT OUT OF YOUR SCAN
- MUCH TOUGHER AT CV
- POWER CORRECTIONS

AOA

- DO NOT USE NOSE TO FLY THE BALL
- FIXING A SLOW
- FIXING A FAST
- TRIM

# TOUCHDOWN

FLY THE BALL ALL THE WAY TO T/D

- SCAN BALL UNTIL TD!!
- HEAD SHOULDN’T BE FACING DOWN RWY

MRT / BOARDS IN

ROTATE

- DON’T DELAY

# 6 RULES TO GOOD BALL FLYING

- NEVER LEAD A LOW
- ALWAYS LEAD A HIGH
- WHEN LOW AND SLOW, FIX THE LOW THEN THE SLOW
- WHEN HIGH AND FAST, FIX THE FAST THEN THE HIGH
- NEVER RE-CENTER A HIGH BALL IN CLOSE, BUT STOP THE RISING BALL
- FLY THE BALL ALL THE WAY TO TOUCHDOWN

# PATTERN

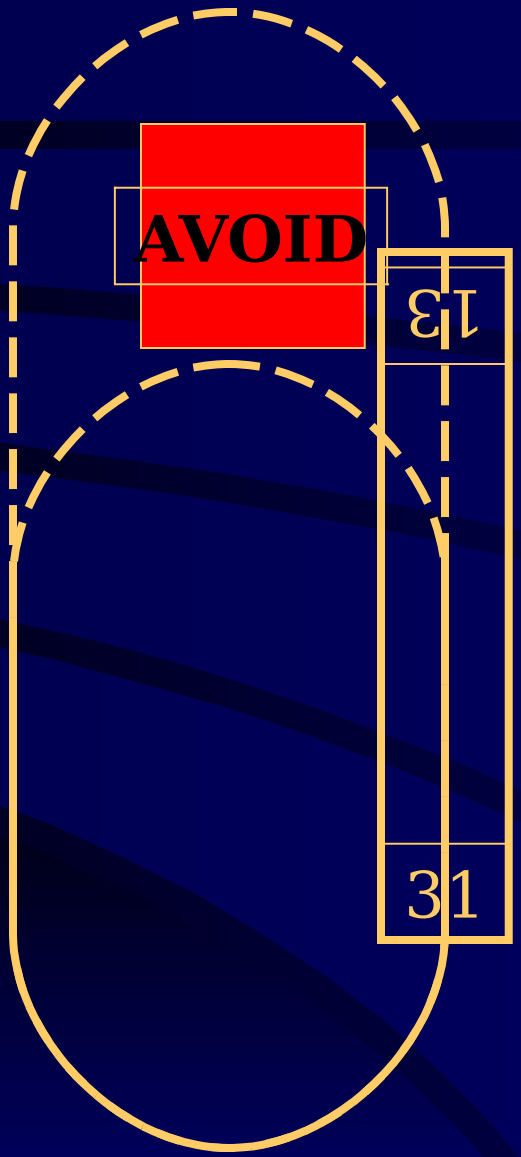
- PILOT CONTROLLED PATTERN
- INTERVAL
  - ~3 SECS PRIOR TO YOUR WINGLINE (9:30)
- CROSSWIND
  - 130 KTS / 30º AOB
  - ADJUST FOR WINDS ON DOWNWIND
  - ALWAYS CHECK YOUR BELLY CLEAR
- LOW VISIBILITY CALLS
  - ONLY IF REQUIRED BY LSO/TOWER AND ALWAYS AT NIGHT
  - “100 TURNING DOWNWIND” OR “100 CROSSWIND”

# PATTERN

DOWNWIND

- LANDING CHECKS
- THINK ABOUT YOUR LAST PASS
- QUAL # ABEAM

# NOISE ABATEMENT



# RESPONSE TO LSO

- WAVEOFF
  - CAN BE VERBAL AND/OR VISUAL
  - MRT / BOARDS IN / ON SPEED
    - DON’T OVERROTATE
  - EXPECT ONE TEST WAVEOFF PER PERIOD
- OWN WAVEOFFS
- LINEUP
  - USE ~10-15º AOB FOR LINEUP CORRECTIONS
  - EXPECT ONE TEST LINEUP PER PERIOD

# LSO CALLS

IMPERATIVE vs INFORMATIVE

VOICE INFLECTION

NO COMM ON THE BALL

- UNLESS SAFETY OF FLIGHT IS A FACTOR

# DELTA PATTERN

DELTA EASY

- WHEN TOLD TO “DELTA”, ASSUME DELTA EASY
- GEAR/FLAPS DOWN, BOARDS IN, 130 KTS, PATTERN ALTITUDE
- COMM / INTERVAL
- ENTRY FROM THE BREAK OR TAKEOFF
- “CHARLIE”

# DELTA PATTERN

DELTA CLEAN

- CLEAN, 200 KTS, WHATEVER ALTITUDE TOWER DICTATES
- COMM / INTERVAL
- ENTRY FROM THE BREAK OR TAKEOFF
- “CHARLIE” / PATTERN RE-ENTRY
- RECOMMENDED WHEN LSO NOT ON STATION
  - FUEL CONSERVATION

# FULL STOPS AT NJW

## COMM

- LSO: “ROGER BALL, FULL STOP”
- SNA: “WITH THE GEAR”

## FULL STOP TO THE CARRIER BOX

- UNLESS OTHERWISE DICTATED BY LSO
- CROSSWIND TECHNIQUE

## COMPLETE LANDING ROLL-OUT

- GROUND BTN 10 (355.8)

# RTB TO NMM

COMM

- LSO: “ROGER BALL, NEXT TO LAST”
  - SNA ACKNOWLEDGE: “NEXT TO LAST”
- FINAL PASS, LSO: “ROGER BALL, DIVERT”
  - SNA ACKNOWLEDGE: “DIVERT”

CLEARANCE

- GROUND : BTN 10 (355.8)
  - IF UNABLE TO GET CLEARANCE BEFORE THE ABEAM, PICK IT UP FROM TOWER ON THE GO
- MUST RTB VIA IFR CLEARANCE

LOW FUEL STATE

- SNA RESPONSIBLE FOR FUEL MANAGEMENT
  - IF LOW, TACTFULLY INFORM THE LSO

# RTB TO NMM

CLIMBOUT

- STAY “DIRTY” UNTIL TOLD TO “EXECUTE ASSIGNED CLIMBOUT” BY TOWER
- ABOVE PATTERN ALTITUDE WHEN #1 UPWIND
- TURN WHEN ABOVE 1500’ MSL

250 KTS ENROUTE

DON’T BOUNCE AT NMM

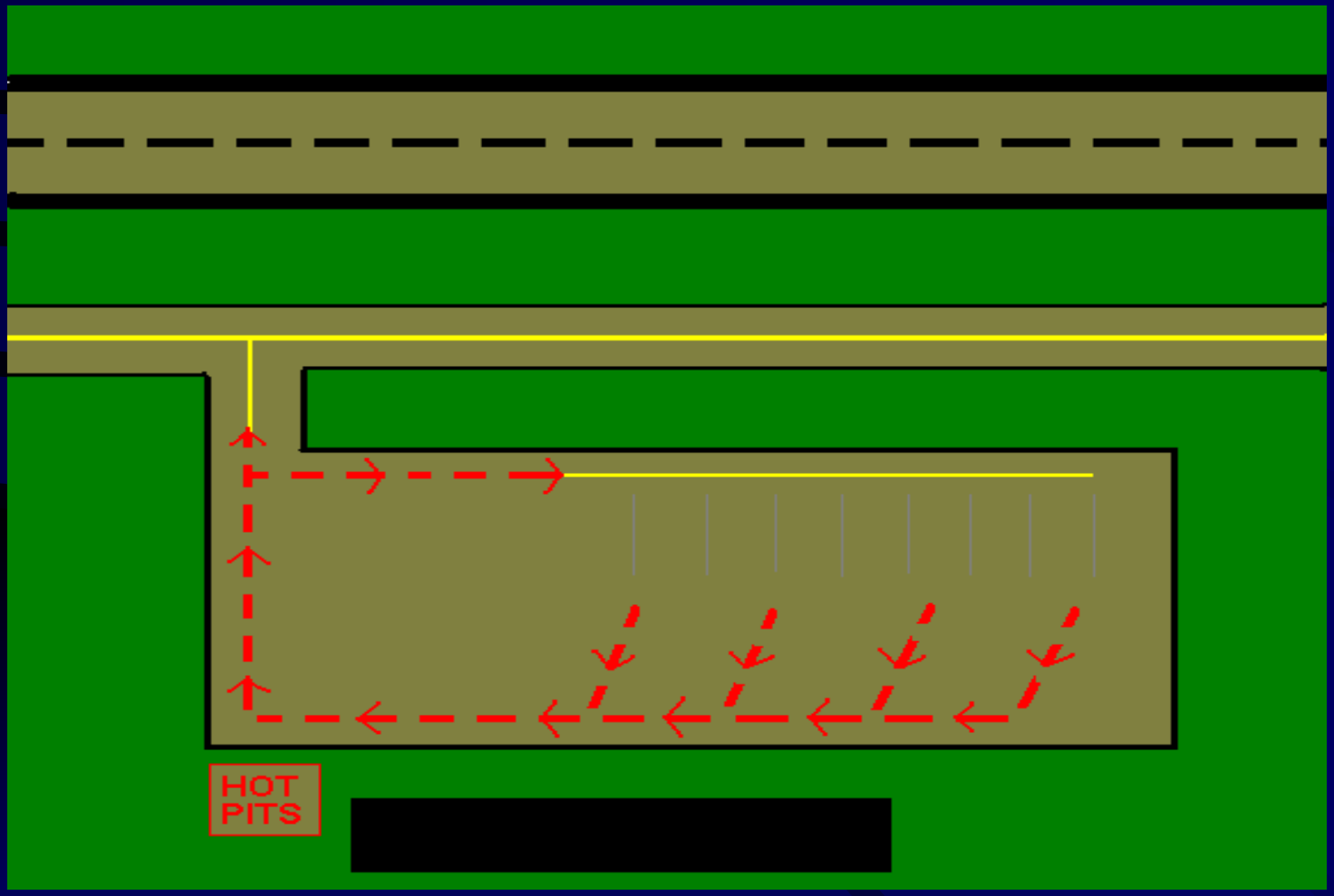
# GROUND PROCEDURES AT NJW

AFTER LANDING
- TAXI SLOWLY IN LINE AREA
- FOLLOW PC SIGNALS

HOT SWITCH PROCEDURES
- CHECKLIST IN SOP/CQ KNEEBOARD CARDS
- ENSURE
  - SEAT IS SAFE, FOD SCREEN IN PLACE, PARKING BRAKE SET, THROTTLE FRICTION MAX
  - DON'T LEAVE JET UNTIL OTHER PILOT IS STANDING THERE

HOT PIT PROCEDURES
- TAXI SLOWLY INTO PITS
- SIGNALS

# NJW Hot Pit/Hot Switch Taxi Routes



# GROUND PROCEDURES AT NJW

PRIOR TO TAXI

- PC CHECKS
- NO ATIS AVAILABLE
- ATTEMPT TO GET CLEARANCE BTN 10 (355.8) IF RTB AFTER THIS PERIOD

PRIOR TO TAKEOFF

- CALL UP & READY TO LSOs ON BTN 9
  - “PADDLES, 100 UP & READY, 13.5, T-1”
- CAUTION – Don’t hit each other in marshal
- BE PREPARED FOR SECTION TAKEOFF

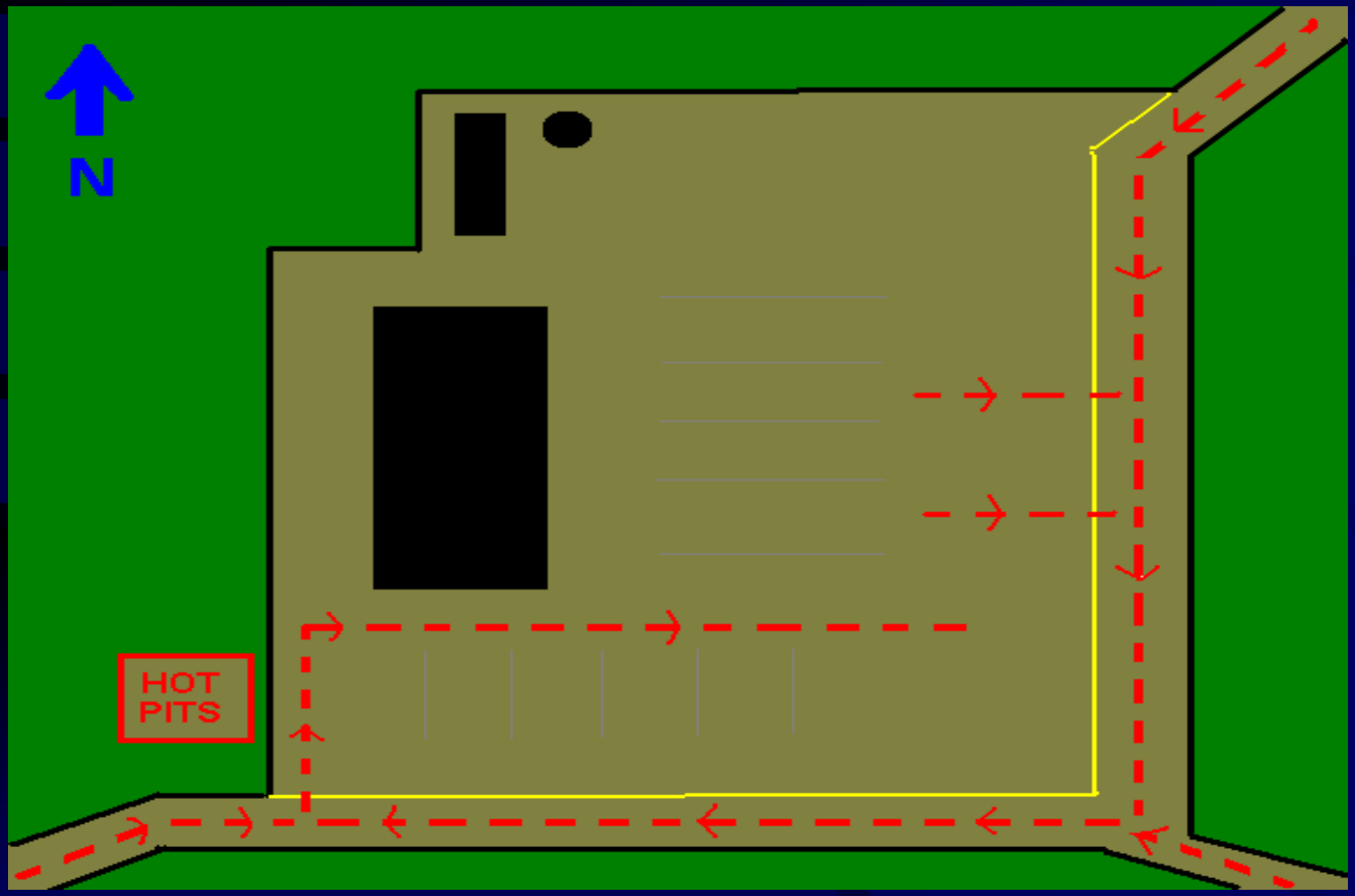
# TAKEOFF FROM NJW

- SECTION TAKEOFF
  - 1st A/C TAKE FAR SIDE OF RWY
    - Do MRT Checks when ready
    - You do not have to wait until -2 is in position for MRT CK
  - 2nd A/C WON’T RELEASE BRAKES UNTIL 1st A/C IS AIRBORNE
- AIRBORNE
  - EXPECT TO TURN DOWNWIND
    - FLAPS – FULL / Do LDG Checks!
    - LANDING LIGHT OFF

# FCLP’s AT NMM

- CALLSIGN / CLEARANCE
- DEPARTURE / PATTERN ENTRY
  - TOWER DOWNWIND
    - TALK ON BTN 12 AND GET INTVL BEFORE TURNING
- PATTERN
  - BARO ALT AT THE 90 POSITION
    - RWY 1L 700’ / RWY 19L 750’ / RWY 28 750’
- FULL STOP COMM
- MONITOR BASE FOR CONTINGENCIES

# NMM Hot Pit/Hot Switch Taxi Routes



# NIGHT FCLP

Night FCLP procedurally are no different:

- Preflight paying attention to internal and external lighting
- Ensure you have operable system and RADALT
- Taxi slower and more cautiously
- Review Night FAM procedures
- Will fly to and from NJW
- Night overhead is 60 degrees MAX AOB / 300 KTS
- No Carrier Break
- No lower than 300’ without a ball.
- Strobes lights on
- Call downwind if more than 2.0 miles upwind

# EMERGENCIES

ABORTS

NORDO

SYSTEM FAILURES

BIRDSTRIKE / MIDAIR

EJECTION

DOWNED AIRCRAFT

# LSO DEBRIEF

- EXPECT ONE AFTER EACH PERIOD
- LSO IS ALWAYS RIGHT
  - IF THE LSO SAYS YOU WERE HIGH - YOU WERE HIGH!
- GRADES
  - SIGNIFICANCE (OR INSIGNIFICANCE)
  - TRENDS ARE THE KEY
  - DID I MENTION: LSO IS ALWAYS RIGHT
- ASK QUESTIONS
  - THERE SHOULD BE NO DOUBT WHAT THE LSO EXPECTS OF YOU FOR THE NEXT PERIOD

# SNA RESPONSIBILITIES

## TRACKING CQ EVENTS

- IF YOU FALL BEHIND, ENSURE LSO IS AWARE (TIS UPDATED)
- KNOW WHICH EVENT YOU SHOULD BE FLYING EACH DAY, IF NOT SCHEDULED CORRECTLY INFORM LSO

## YELLOWSHEETS

- ENSURE THAT YOU FILL ONE OUT AFTER EACH PERIOD USING ACTUAL T/O AND LAND TIMES
- DAY- CODE “5” / NIGHT- CODE “E”

## CREW REST

## PASS BOOK/PALM PILOT

- DO NOT LOSE / NEEDS TO END UP IN CQ STAN

## FCLP SUMMARY / TREND ANALYSIS

# CATS AND DOGS

- EYEBALL CALIBRATIONS
- FINES
  - CQ PARTY!?!?

# CQ-1S & CQ-2S SIM INFO

# CASE I

WX 3000 / 5

CASE I HOLDING

- MONITORING EITHER MARSHAL OR TOWER FREQ
- FORMATION CONSIDERATIONS

SIGNAL “CHARLIE” FROM TOWER

- LEAD SAFE COMMON ON RIGHT RADIO
- DEPART LOW HOLDING @ PT 3 ON A HEADING OF 210° RELATIVE TO THE BRC
- EXPECT HOOK UP FIRST PASS, UNLESS TOWER DICTATES OTHERWISE

SET UP FOR 7 NM STRAIGHTAWAY INTO THE BREAK

1200’ @ 7NM

# CASE I

DESCEND TO THE INITIAL
- 800’ AT 3NM / 300 KTS

CONCENTRATE ON GOOD FORMATION

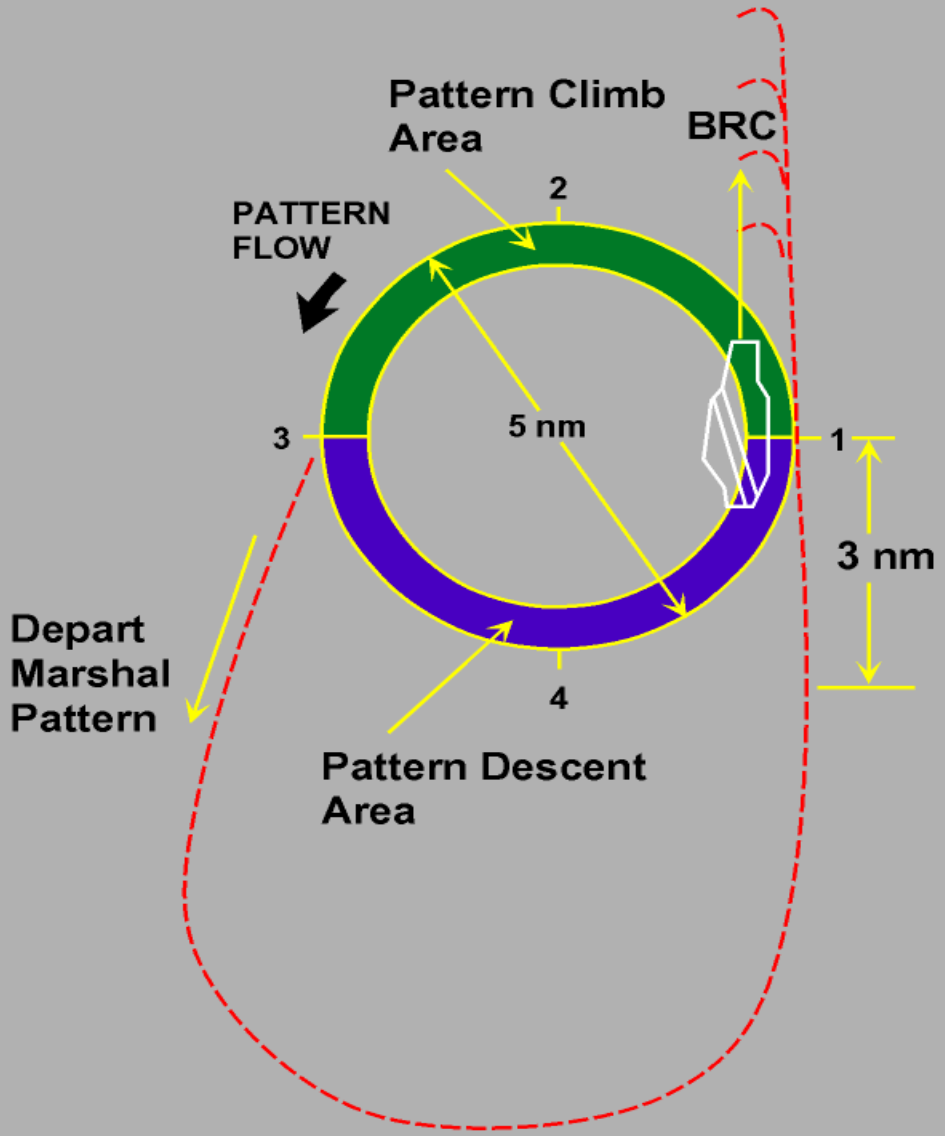
LEAD WILL BREAK 1 NM UPWIND

WINGMEN USE 17 SECOND BREAK INTERVAL

ENSURE BRC IN COURSE SETTING(PLAN MODE)

“SPIN” PROCEDURES
- START SPIN NO LATER THAN THE BOW
- CLIMB TO 1200’ THEN TURN /  STAY WITHIN 3 NM
- DESCEND TO 800’ FOR THE BREAK
- SPIN PATTERN HAS PRIORITY OVER BREAK TRAFFIC

# CASE I Holding

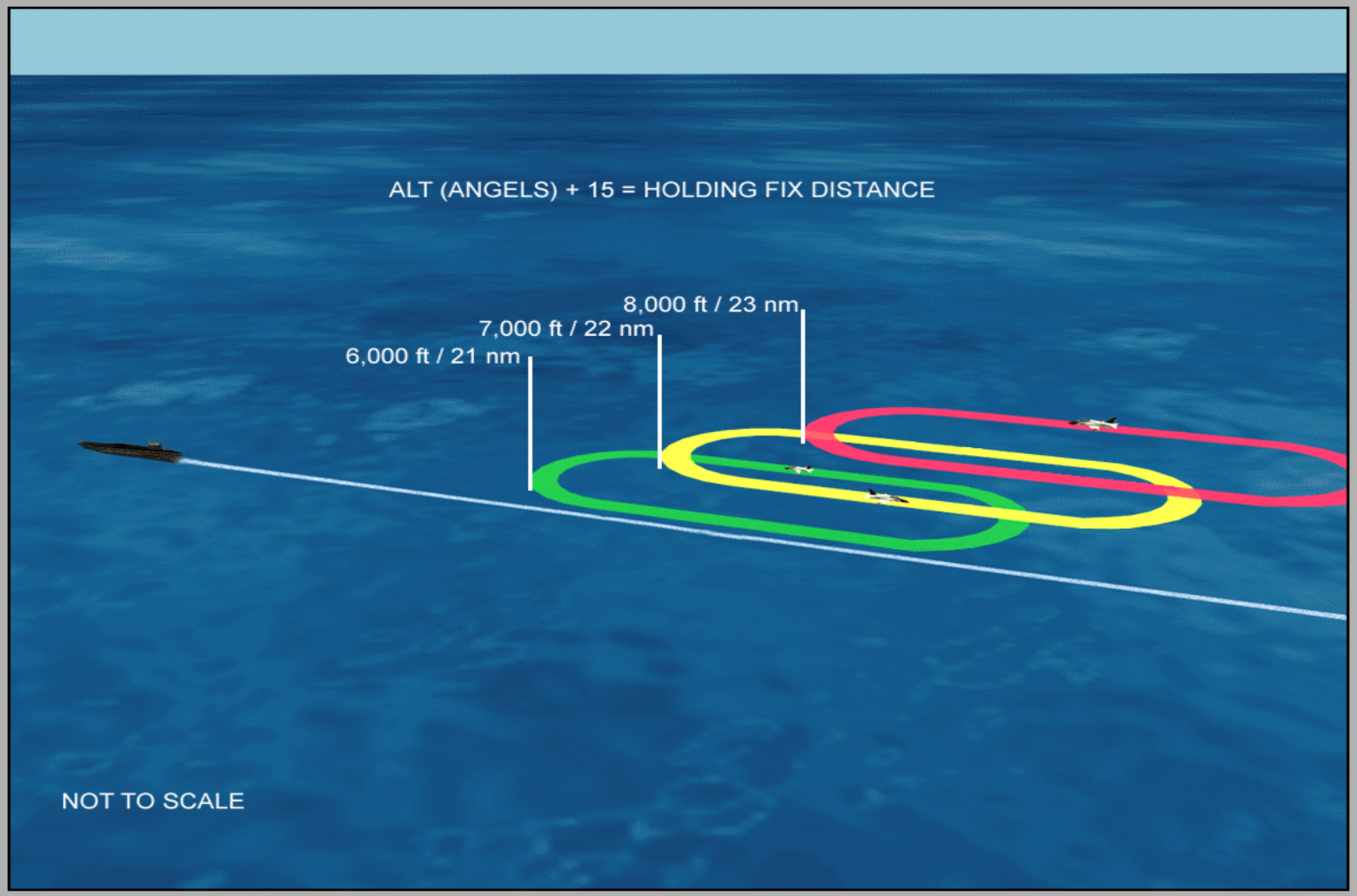



CASE I MARSHAL PATTERN RECOVERY

# CASE II

- WX 1000 / 5
- MARSHAL AS ASSIGNED / REPORT ESTABLISHED
  - DME = ANGELS + 15
- LEAD BREAK UP DIVISION FOR INDIVIDUAL HOLDING
  - DASH 2 WILL NORMALLY REMAIN WITH LEAD
  - DASH 3 AND 4 EXPECT L/S TO JOIN UP ON YOU EVENTUALLY
    - YOU MUST REMAIN AT YOUR ASSIGNED FIX UNTIL L/S JOINS
- REPORT “SEE YOU AT _____ DME”
  - DON’T SEE SHIP AT 5NM, CLIMB STRAIGHT AHEAD ON BRC
- SWITCH TOWER & ENTER NORMAL BREAK 800’ / 300KTS

# CASE II Marshal

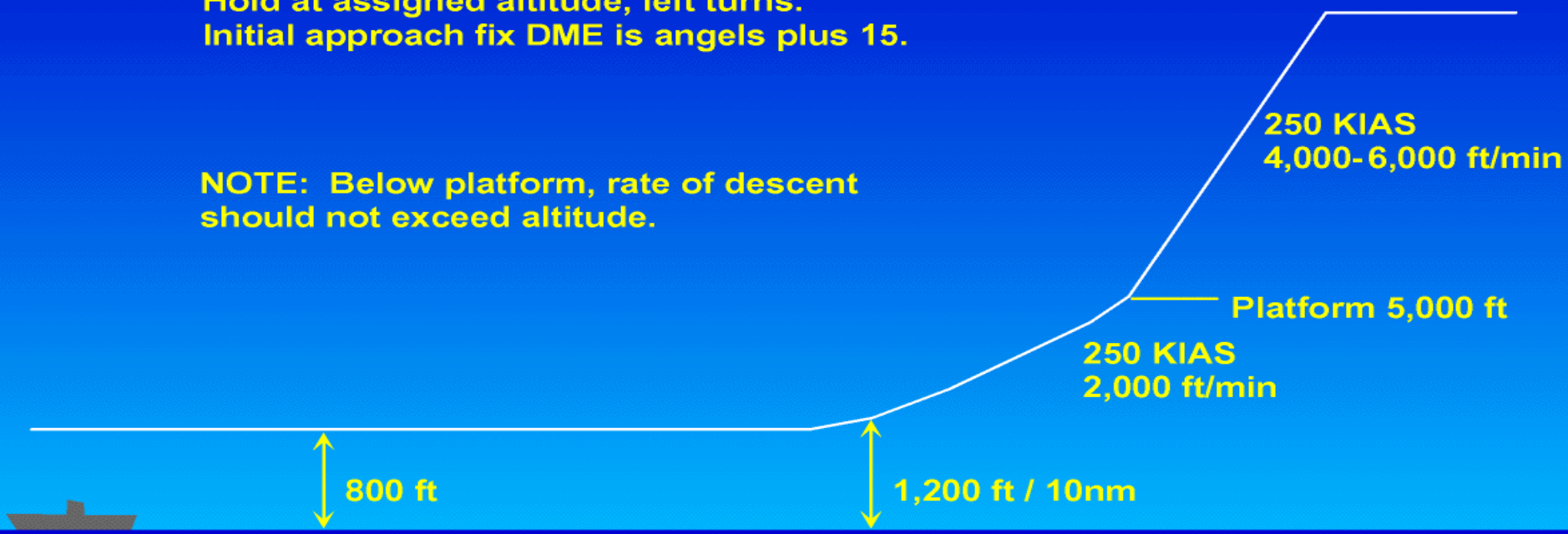



**CASE II MARSHAL HOLDING PATTERN**

# CV-1 Approach

Hold at assigned altitude, left turns.
Initial approach fix DME is angels plus 15.

NOTE: Below platform, rate of descent should not exceed altitude.




CASE II MARSHAL PATTERN RECOVERY

# CV Deck Procedures

## ARRESTMENT

- FLY THE BALL ALL THE WAY TO TOUCHDOWN
- Keep your feet off of the BRAKES during touchdown!
- MRT S/B'S IN ON TOUCHDOWN - DO NOT REDUCE POWER UNTIL ENGINE IS AT MRT AND A/C STOPS
- STAY OFF BRAKES DURING PULLBACK

# CV Deck Proc.

USE NWS - FULL GAIN

NOTIFY TOWER IF FUEL AT OR BELOW HOLD DOWN

T/O CHECKLIST COMPLETE PRIOR TO CROSSING JBD

- FULL FLAPS
- TRIM
  - 3 1/2° NOSE UP
- BARO ALTIMETER SHOULD READ 60’

WEIGHT BOARD AND SIGNALS

# Catapult Procedures

TAKE TENSION

- MRT / CHECK GAUGES & LIGHTS / WIPE OUT CONTROLS INCLUDING RUDDERS / USE CAT GRIP / RETRACT LAUNCH BAR
- HEELS ON DECK / UNDER TOE GUARDS - *OFF BRAKES*
- HEAD AGAINST SEAT
- SALUTE CAT OFFICER

# Cat Proc.

SUSPEND

- PRIOR TO SALUTE - SHAKE HEAD “NO” AND BROADCAST “SUSPEND, SUSPEND, SUSPEND”
- AFTER SALUTE - SAME, BUT BE READY TO GO
- REMAIN AT MRT UNTIL CAT OFFICER MOVES IN FRONT OF A/C WITH “THROTTLE BACK” SIGNAL.

CATAPULT MALFUNCTIONS

- COLD / SOFT CAT
- HANGFIRE
- BROKEN HOLDBACK
- SPIT SHUTTLE

# Cat Proc.

CATAPULT TECHNIQUE

- HOLD STICK LIGHTLY - ALLOW IT TO COME AFT DURING STROKE, THEN SET 8-10° ATTITUDE AS A/C BECOMES AIRBORNE
- SCAN ADI, AIRSPEED
- DO NOT UNDER/OVER-ROTATE
- ELEVATOR TRIM WILL ROTATE A/C TO PROPER CLIMBING ATTITUDE
- AOA WILL INITIALLY BE ~ 19 UNITS BUT WILL QUICKLY ACCELERATE TO 17 UNITS
- CHECK HEADING, BRC, A/S, AND INTERVAL
- LOWER HOOK IF REQUIRED

# DEPARTURE PROCEDURES

## CASE I

- TOWER SHOULD GIVE YOU A STEER(PIGEONS) FOR THE DIVERT AIRFIELD
- MAINTAIN 500’ MSL @ 300 KIAS UNTIL 7 DME THEN CLIMB ON COURSE(SHORTEST DIRECTION)
- CONTACT DEPARTURE FOR RTB INSTRUCTIONS
  - STAY OUTSIDE 10 DME
- IF DIRECTED TO JOIN ON LEAD SAFE TOWER WILL PASS APPROPRIATE INFORMATION
  - 250 KT RENDEZVOUS, JOIN TO THE OUTSIDE OF THE TURN IN RIGHT ECHELON
  - SWITCH UP ON BACK RADIO
- DO NOT LEAVE WARNING AREA UNTIL 2-WAY COMM ESTABLISHED WITH SEALORD

# DEPARTURE PROCEDURES

## CASE II

CLIMB TO 500’ STRAIGHT AHEAD / 300 KIAS

7 NM TURN TO INTERCEPT 10 DME ARC

- TURN APPROPRIATE DIRECTION FOR DEPARTURE RADIAL

REMAIN VMC ESTABLISHED OUTBOUND

RENDEZVOUS

- VFR ON TOP
- DEPARTURE RADIAL AT DME OF ANGELS + 15

MANDATORY REPORTS

- “AIRBORNE”
- “ARCING”
- “OUTBOUND”

# BINGO PROCEDURES

- BE PREPARED TO BINGO
- UPDATE BINGO INFO AS PROVIDED BY TOWER
- NOTIFY TOWER WHEN AT BINGO - DON'T WAIT TO BE ASKED. THIS IS AN EMERGENCY PROCEDURE
- IMMEDIATELY TURN TO BINGO HEADING AND CLEAN UP (INCLUDING HOOK). ENSURE YOU ARE CLEAR OF TRAFFIC
- ACCEL TO 300 KIAS LEVEL
- MRT CLIMB TO PRE-DETERMINED ALTITUDE
- DON'T WAIT FOR SAFETY PILOT TO JOIN
- IF BINGO --> LANDING AT DESIGNATED BINGO FIELD

# BINGO PROCEDURES

- SWITCH TO DEPARTURE AND TUNE IN BINGO TACAN SQUAWK “EMER”
- GO IMC IF NECESSARY TO PRESERVE PROFILE
- DISCUSS COORDINATION WITH APPROACH CONTROL
- RECOVERIES - BREAK, DOWNWIND, BASE LEG ENTRY, VFR STRAIGHT-IN, OR MIN FUEL GCA
- HEADS UP FOR OTHER A/C!
- LAND ON SPEED
- FEET DRY CHECKLIST
- REMEMBER CARRIER TIRE PRESSURE… WET RUNWAY
- SAFETY PILOT TECHNIQUES - LEAD VS. WINGMAN, ETC..

# QUESTIONS ??